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NTC ORLANDO
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TECHNICAL MEMORANDUM REGARDING REVIEW OF SOIL INVESTIGATION DERIVED WASTE (IDW) AT GROUPS 4 AND 5 NTC ORLANDO FL

2/12/1998

ABB ENVIRONMENTAL

ABB

To: Orlando Partnering Team

From: G. Mudd, IR Tech Lead, ABB-ES

Date: February 12, 1998

Subject: Review of Soil IDW Analytical Data, Groups IV & V

During the screening investigations at the Groups IV and V study areas (SAs), ABB-ES installed a total of 25 permanent monitoring wells at six of the sites (SAs 30, 32, 35, 36, 37, and 42). The soil IDW generated during the installation of these wells is currently being stored in thirty (30) 55-gallon drums at the various study areas and at Building 2078. We collected a subsurface soil sample from immediately above the water table surface at each well location. The samples were analyzed for the full suite TCL/CLP at an off-site laboratory. The data can be utilized to characterize the quality of the soil IDW. Attached for your review you will find a copy of the analytical results from the subsurface soil samples (i.e. those with a "B" designation), including a "hits" list and a complete listing of the results. Below is a summary of the results and recommendation regarding the disposal options for the IDW.

Study Area 30. At SA 30 no compound detected at concentrations in excess of screening criteria at any of the seven monitoring well sites. For compounds with no SCG the concentrations measured less than 1 ug/kg. Therefore ABB-ES recommends that all of the soil IDW at this site be returned to its point of origin.

Study Area 32. At SA 32 no compound detected at concentrations in excess of screening criteria at any of the three monitoring well sites. For compounds with no SCG the concentrations measured less than 1 ug/kg. Therefore ABB-ES recommends that all of the soil IDW at this site be returned to its point of origin.

Study Area 35. At SA 35 arsenic was the only compound detected at concentrations in excess of screening criteria. Arsenic was detected at a concentration of 1.3, 1.5, and 1.3 ug/kg in samples 35B00101, 35B00201, and 35B00301, respectively. This concentration slightly exceeds background and the residential RBC but is lower than the industrial RBC. There is no SCG for arsenic. Given the planned future use of this property, ABB-ES recommends that all of the soil which exceeds the residential RBC (i.e. three 55-gallon drums) be transported base for disposal in a solid waste landfill.

Study Area 36. Like SA 35, arsenic was the only compound detected at concentrations in excess of screening criteria at SA 36. Arsenic was detected at a concentration of 1.2 and 2.2 ug/kg, respectively in samples 36B00401 and 36B00501. This concentration slightly exceeds background and the residential RBC but is lower than the industrial RBC. There is no SCG for arsenic. Given the planned future use of this property, ABB-ES recommends that all of the soil which exceeds the residential RBC (i.e. two 55-gallon drums) be transported base for disposal in a solid waste landfill.

Study Area 37. At SA 37 there no compound detected at concentrations in excess of screening criteria at any of the two monitoring well sites. There are several compounds which do exceed the background value but not their respective RBC. Based on these results ABB-ES recommends that all of the soil IDW at this site be returned to its point of origin.

Study Area 42. At SA 42 there was no compound detected at concentrations in excess of screening criteria at any of the three monitoring well sites. There are several compounds which do exceed the background value but not their respective RBC. Based on these results ABB-ES recommends that all of the soil IDW at this site be returned to its point of origin.

ATTACHMENT A
SOIL ANALYTICAL RESULTS

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		30B00101		30B00101D		30B00201		30B00301		30B00301D	
									2 DRUMS				1 DRUM		2 DRUMS			
Sampling Date									10/23/97		10/23/97		10/30/97		10/31/97		10/31/97	
Semivolatile Organics, ug/kg																		
Acenaphthylene			NA		2,300,000	n	61,000,000	n										
Benzo(a)anthracene			NA		880	c	7,800	c			12	J						
Benzo(a)pyrene			NA		88	c	780	c			20	J						
Benzo(b)fluoranthene			NA		880	c	7,800	c			19	J						
Benzo(g,h,i)perylene			NA		2300000	n	61,000,000	n										
Benzo(k)fluoranthene			NA		8,800	c	78,000	c			27	J						
bis(2-Ethylhexyl)phthalate			NA		46,000		410,000				210	J						
Chrysene			NA		88,000	c	780,000	c			33	J						
Di-n-butylphthalate			NA		7,800,000	n	200,000,000	n										
Fluoranthene			NA		3,100,000	n	82,000,000	n			41	J	8	J				
Indeno(1,2,3-cd)pyrene			NA		880	c	7,800	c										
Phenanthrene			NA		2,300,000	n	61,000,000	n			20	J						
Pyrene			NA		2,300,000	n	61,000,000	n			57	J						
Pesticides/PCBs, ug/kg																		
4,4'-DDD			NA		2,700	c	24,000	c										
4,4'-DDE			NA		1,900	c	17,000	c										
4,4'-DDT			NA		1,900	c	17,000	c	0.34	J	0.15	J					0.54	J
Aldrin			NA		38	c	340	c							0.09	J	0.05	J
alpha-Chlordane			NA		490	c	4,400	c									0.07	J
beta-BHC			NA		350	c	3,200	c			0.18	J						
delta-BHC			NA		350	c	3,200	c							0.1	J		
Dieldrin			NA		40	c	360	c							2.3	J	2.7	J
Endosulfan sulfate			NA		ND		ND											
Endrin ketone			NA		ND		ND						0.18	J	0.95	J		
gamma-BHC (Lindane)			NA		490	c	4,400	c										
gamma-Chlordane			NA		490	c	4,400	c									0.11	J
Heptachlor			NA		140	c	1,300	c			0.11	J					0.07	J
Heptachlor epoxide			NA		70	c	630	c										
Methoxychlor			NA		390,000	n	10,000,000	n									0.48	J
Herbicides, ug/kg																		
2,4,5-T			NA		780,000	n	20,000,000	n										
Inorganics, mg/kg																		

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		30B00101		30B00101D		30B00201		30B00301		30B00301D	
Sampling Date									10/23/97		10/23/97		10/30/97		10/31/97		10/31/97	
Aluminum	2,119		NA		78,000	n	1,000,000	n	105		112		415	J	224	J	247	J
Arsenic	1.1		NA		0.43 /23	c/n	3.8 c/610	c/n					1.5	J			2.3	J
Barium	3.6		NA		5,500	n	140,000	n										
Calcium	115		NA		1000000		1000000		654	J	1120	J	83.3	J	2940	J	1140	J
Chromium	4		NA		390	n	10,000	n	0.56	J	0.69	J	2.5		1.8	J	2.3	J
Cobalt	2		NA		4,700	n	120,000	n					0.89	J	0.3	J	1	J
Copper	ND		NA		270,000	n	1,000,000	n	0.65	J			0.63	J				
Iron	264		NA		23,000	n	610,000	n	17.6	J	12.2	J	16.9	J	25.1	J	22.4	J
Lead	3.9		NA		400		400		0.59	J	1	J	0.74	J	0.58	J	0.53	J
Magnesium	32.8		NA		460,468		460,468		20.7	J					25	J	19.4	J
Manganese	2.1		NA		1,800	n	47,000	n					0.44	J				
Mercury	ND		NA		23	n	610	n										
Selenium	1.3		NA		390	n	10,000	n					0.79	J			1.3	J
Silver	ND		NA		390	n	10,000	n					1.1	J			1.5	J
Thallium	ND		NA		ND		ND											
Vanadium	3.4		NA		550	n	14,000	n					0.5	J				
Zinc	5.6		NA		23,000	n	610,000	n	0.9	J								
General Chemistry, mg/kg																		
TRPH	ND		ND		ND		ND						13		28			

Appendix B
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Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		30B00401		30B00501		30B00601		30B00701	
									2 DRUMS		1 DRUM		1 DRUM		1 DRUM	
Sampling Date									10/30/97		10/24/97		10/24/97		10/24/97	
Semivolatile Organics, ug/kg																
Acenaphthylene			NA		2,300,000	n	61,000,000	n					7	J		
Benzo(a)anthracene			NA		880	c	7,800	c					20	J		
Benzo(a)pyrene			NA		88	c	780	c					22	J		
Benzo(b)fluoranthene			NA		880	c	7,800	c					40	J		
Benzo(g,h,i)perylene			NA		2300000	n	61,000,000	n					13	J		
Benzo(k)fluoranthene			NA		8,800	c	78,000	c					15	J		
bis(2-Ethylhexyl)phthalate			NA		46,000		410,000						150	J		
Chrysene			NA		88,000	c	780,000	c					32	J		
Di-n-butylphthalate			NA		7,800,000	n	200,000,000	n					42	J		
Fluoranthene			NA		3,100,000	n	82,000,000	n					36	J		
Indeno(1,2,3-cd)pyrene			NA		880	c	7,800	c					16	J		
Phenanthrene			NA		2,300,000	n	61,000,000	n					12	J		
Pyrene			NA		2,300,000	n	61,000,000	n					43	J		
Pesticides/PCBs, ug/kg																
4,4'-DDD			NA		2,700	c	24,000	c					6.3	J		
4,4'-DDE			NA		1,900	c	17,000	c					200	D		
4,4'-DDT			NA		1,900	c	17,000	c					270	DJ		
Aldrin			NA		38	c	340	c								
alpha-Chlordane			NA		490	c	4,400	c					27	D		
beta-BHC			NA		350	c	3,200	c					0.12	J		
delta-BHC			NA		350	c	3,200	c					0.05	J		
Dieldrin			NA		40	c	360	c								
Endosulfan sulfate			NA		ND		ND						7.8	J		
Endrin ketone			NA		ND		ND				0.49	J	1.4	J	0.36	J
gamma-BHC (Lindane)			NA		490	c	4,400	c					0.16	J		
gamma-Chlordane			NA		490	c	4,400	c					29	D		
Heptachlor			NA		140	c	1,300	c	0.09	J			0.44	J		
Heptachlor epoxide			NA		70	c	630	c					1.2	J		
Methoxychlor			NA		390,000	n	10,000,000	n								
Herbicides, ug/kg																
2,4,5-T			NA		780,000	n	20,000,000	n			0.4	J				
Inorganics, mg/kg																

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		30B00401		30B00501		30B00601		30B00701	
Sampling Date									10/30/97		10/24/97		10/24/97		10/24/97	
Aluminum	2,119		NA		78,000	n	1,000,000	n	205	J			975			
Arsenic	1.1		NA		0.43 /23	c/n	3.8 c/610	c/n	1.5	J						
Barium	3.6		NA		5,500	n	140,000	n			0.91	J	10.5	J		
Calcium	115		NA		1000000		1000000		103	J	578	J	7770		1550	
Chromium	4		NA		390	n	10,000	n	2.2	J			4		1.3	J
Cobalt	2		NA		4,700	n	120,000	n	0.73	J						
Copper	ND		NA		270,000	n	1,000,000	n	0.74	J			1.4	J		
Iron	264		NA		23,000	n	610,000	n	17.6	J			1390		13	J
Lead	3.9		NA		400		400		1.1	J	0.59	J	52.2	J	4.6	J
Magnesium	32.8		NA		460,468		460,468		11.1	J						
Manganese	2.1		NA		1,800	n	47,000	n					55.1			
Mercury	ND		NA		23	n	610	n	0.03	J			0.04	J		
Selenium	1.3		NA		390	n	10,000	n								
Silver	ND		NA		390	n	10,000	n	0.97	J						
Thallium	ND		NA		ND		ND		1.3	J						
Vanadium	3.4		NA		550	n	14,000	n								
Zinc	5.6		NA		23,000	n	610,000	n			0.2	J	71.3			
General Chemistry, mg/kg																
TRPH	ND		ND		ND		ND		13				45			

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.
[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). For detected analytes and compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.
[3] RBC = Risk-Based Concentration Table, USEPA Region III, March 1997, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, potassium, sodium, magnesium) screening values were derived based on recommended daily allowances (RDAs).

n = noncarcinogenic pathway
c = carcinogenic pathway
NA = Not applicable (for SCGs) or not analyzed.
ND = Not determined.
mg/kg = milligrams per kilogram.
ug/kg = micrograms per kilogram.
OSWER = Office of Solid Waste and Emergency Response.
USEPA = U.S. Environmental Protection Agency.
J = Reported concentration is an estimated quantity.
All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

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Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
Volatile organics, ug/kg																						
1,1,1-Trichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1,2,2-Tetrachloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1,2-Trichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1-Dichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1-Dichloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloroethene (total)	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloropropane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
2-Butanone	11	U	11	U	NA		12	UJ	12	UJ	12	UJ	11	UJ	10	U	10	U	NA		11	U
2-Hexanone	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
4-Methyl-2-pentanone	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Acetone	11	UJ	11	U	NA		12	U	12	U	12	U	11	U	10	UJ	10	UJ	NA		11	UJ
Benzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Bromodichloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Bromoform	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Bromomethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Carbon disulfide	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Carbon tetrachloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chlorobenzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloroform	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
cis-1,3-Dichloropropene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Dibromochloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Ethylbenzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Methylene chloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Styrene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Tetrachloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Toluene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
trans-1,3-Dichloropropene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Trichloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Vinyl chloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Xylene (total)	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Semivolatile organics, ug/kg																						

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
Volatile organics, ug/kg																						
1,1,1-Trichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1,2,2-Tetrachloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1,2-Trichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1-Dichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,1-Dichloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloroethene (total)	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
1,2-Dichloropropane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
2-Butanone	11	U	11	U	NA		12	UJ	12	UJ	12	UJ	11	UJ	10	U	10	U	NA		11	U
2-Hexanone	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
4-Methyl-2-pentanone	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Acetone	11	UJ	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Benzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	UJ	10	UJ	NA		11	UJ
Bromodichloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Bromoform	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Bromomethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Carbon disulfide	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Carbon tetrachloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chlorobenzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloroethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloroform	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Chloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
cis-1,3-Dichloropropene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Dibromochloromethane	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Ethylbenzene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Methylene chloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Styrene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Tetrachloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Toluene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
trans-1,3-Dichloropropene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Trichloroethene	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Vinyl chloride	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Xylene (total)	11	U	11	U	NA		12	U	12	U	12	U	11	U	10	U	10	U	NA		11	U
Semivolatile organics, ug/kg																						

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
1,2,4-Trichlorobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
1,2-Dichlorobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
1,3-Dichlorobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
1,4-Dichlorobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2,2'-oxybis(1-Chloropropane	360	UJ	360	UR	360	UJ	410	U	390	U	390	UJ	370	UJ	340	UJ	340	UJ	NA		370	UJ
2,4,5-Trichlorophenol	900	U	900	UR	900	U	1000	U	990	U	980	U	930	U	850	U	860	U	NA		930	U
2,4,6-Trichlorophenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2,4-Dichlorophenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2,4-Dimethylphenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2,4-Dinitrophenol	900	UJ	900	UR	900	UJ	1000	U	990	U	980	UJ	930	UJ	850	UJ	860	UJ	NA		930	UJ
2,4-Dinitrotoluene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2,6-Dinitrotoluene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2-Chloronaphthalene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2-Chlorophenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2-Methylnaphthalene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2-Methylphenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
2-Nitroaniline	900	U	900	UR	900	U	1000	U	990	U	980	U	930	U	850	U	860	U	NA		930	U
2-Nitrophenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
3,3'-Dichlorobenzidine	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
3-Methylphenol/4-Methylphe	360	U	360	UR	360	UJ	410	U	390	U	390	U	370	UJ	340	U	340	U	NA		370	U
3-Nitroaniline	900	U	900	UR	900	U	1000	U	990	U	980	U	930	U	850	U	860	U	NA		930	U
4,6-Dinitro-2-methylphenol	900	UJ	900	UR	900	U	1000	U	990	U	980	UJ	930	UJ	850	UJ	860	UJ	NA		930	UJ
4-Bromophenyl-phenylether	360	U	360	UR	360	UJ	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
4-Chloro-3-methylphenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
4-Chloroaniline	360	U	360	UR	360	U	410	UJ	390	UJ	390	U	370	U	340	U	340	U	NA		370	U
4-Chlorophenyl-phenylether	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
4-Nitroaniline	900	UJ	900	UR	900	U	1000	U	990	U	980	U	930	U	850	UJ	860	UJ	NA		930	UJ
4-Nitrophenol	900	UJ	900	UR	900	UJ	1000	U	990	U	980	UJ	930	UJ	850	UJ	860	UJ	NA		930	UJ
Acenaphthene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Acenaphthylene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	7	J	NA		370	U
Anthracene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Benzo(a)anthracene	360	U	360	UR	12	J	410	U	390	U	390	U	370	U	340	U	20	J	NA		370	U
Benzo(a)pyrene	360	U	360	UR	20	J	410	U	390	U	390	U	370	U	340	U	22	J	NA		370	U
Benzo(b)fluoranthene	360	U	360	UR	19	J	410	U	390	U	390	U	370	U	340	U	40	J	NA		370	U
Benzo(g,h,i)perylene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	13	J	NA		370	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
Benzo(k)fluoranthene	360	U	360	UR	27	J	410	U	390	U	390	U	370	U	340	U	15	J	NA		370	U
bis(2-Chloroethoxy)methane	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
bis(2-Chloroethyl)ether	360	U	360	UR	360	U	410	U	390	UJ	390	U	370	UJ	340	U	340	U	NA		370	U
bis(2-Ethylhexyl)phthalate	360	UJ	360	UR	210	J	410	U	390	U	390	U	370	U	340	UJ	150	J	NA		370	UJ
Butylbenzylphthalate	360	UJ	360	UR	360	U	410	U	390	U	390	U	370	U	340	UJ	340	UJ	NA		370	UJ
Carbazole	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Chrysene	360	U	360	UR	33	J	410	U	390	U	390	U	370	U	340	U	32	J	NA		370	U
Di-n-butylphthalate	360	UJ	360	UR	360	U	410	U	390	U	390	U	370	U	340	UJ	42	J	NA		370	UJ
Di-n-octylphthalate	360	UJ	360	UR	360	U	410	U	390	U	390	U	370	U	340	UJ	340	UJ	NA		370	UJ
Dibenz(a,h)anthracene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Dibenzofuran	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Diethylphthalate	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Dimethylphthalate	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Fluoranthene	360	U	360	UR	41	J	8	J	390	U	390	U	370	U	340	U	36	J	NA		370	U
Fluorene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Hexachlorobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Hexachlorobutadiene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Hexachlorocyclopentadiene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Hexachloroethane	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Indeno(1,2,3-cd)pyrene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	16	J	NA		370	U
Isophorone	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
N-Nitroso-di-n-propylamine	360	U	360	UR	360	UJ	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
N-Nitrosodiphenylamine	360	U	360	UR	360	U	410	U	390	U	390	U	370	UJ	340	U	340	U	NA		370	U
Naphthalene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Nitrobenzene	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Pentachlorophenol	900	UJ	900	UR	900	UJ	1000	U	990	U	980	UJ	930	UJ	850	UJ	860	UJ	NA		930	UJ
Phenanthrene	360	U	360	UR	20	J	410	U	390	U	390	U	370	U	340	U	12	J	NA		370	U
Phenol	360	U	360	UR	360	U	410	U	390	U	390	U	370	U	340	U	340	U	NA		370	U
Pyrene	360	U	360	UR	57	J	410	U	390	U	390	U	370	U	340	U	43	J	NA		370	U
Pesticides/PCBs, ug/kg																						
4,4'-DDD	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	6.3	J	28	DR	3.7	U
4,4'-DDE	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	220	ER	200	D	3.7	U
4,4'-DDT	0.34	J	0.15	J	NA		4.1	UJ	3.9	UJ	0.54	J	3.7	U	3.4	U	270	ER	270	DJ	3.7	UJ
Aldrin	1.8	U	1.8	U	NA		2.1	UJ	0.09	J	0.05	J	1.9	U	1.7	U	1.8	U	18	UR	1.9	U
alpha-BHC	1.8	U	1.8	U	NA		2.1	UJ	2	U	2	U	1.9	U	1.7	U	1.8	U	18	UR	1.9	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
alpha-Chlordane	1.8	U	1.8	U	NA		2.1	UJ	2	UJ	0.07	J	1.9	U	1.7	U	26	ER	27	D	1.9	U
Aroclor-1016	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
Aroclor-1221	73	U	73	U	NA		83	UJ	80	U	79	U	75	U	68	U	69	U	690	UR	75	U
Aroclor-1232	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
Aroclor-1242	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
Aroclor-1248	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
Aroclor-1254	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
Aroclor-1260	36	U	36	U	NA		41	UJ	39	U	39	U	37	U	34	U	34	U	340	UR	37	U
beta-BHC	1.8	UJ	0.18	J	NA		2.1	UJ	2	UJ	2	U	1.9	U	1.7	U	0.12	J	18	UR	1.9	U
delta-BHC	1.8	UJ	1.8	U	NA		2.1	UJ	0.1	J	2	UJ	1.9	U	1.7	UJ	0.05	J	18	UR	1.9	UJ
Dieldrin	3.6	U	3.6	U	NA		4.1	UJ	2.3	J	2.7	J	3.7	U	3.4	U	3.4	U	34	UR	3.7	U
Endosulfan I	1.8	U	1.8	U	NA		2.1	UJ	2	U	2	U	1.9	U	1.7	U	1.8	U	18	UR	1.9	U
Endosulfan II	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	3.4	U	34	UR	3.7	U
Endosulfan sulfate	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	7.8	J	34	UR	3.7	U
Endrin	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	3.4	U	34	UR	3.7	U
Endrin aldehyde	3.6	U	3.6	U	NA		4.1	UJ	3.9	U	3.9	U	3.7	U	3.4	U	3.4	U	34	UR	3.7	U
Endrin ketone	3.6	U	3.6	U	NA		0.18	J	0.95	J	3.9	UJ	3.7	U	0.49	J	1.4	J	34	UR	0.36	J
gamma-BHC (Lindane)	1.8	U	1.8	U	NA		2.1	UJ	2	U	2	U	1.9	U	1.7	U	0.16	J	18	UR	1.9	U
gamma-Chlordane	1.8	U	1.8	U	NA		2.1	UJ	2	UJ	0.11	J	1.9	U	1.7	U	27	ER	29	D	1.9	U
Heptachlor	1.8	UJ	0.11	J	NA		2.1	UJ	2	UJ	0.07	J	0.09	J	1.7	U	0.44	J	18	UR	1.9	U
Heptachlor epoxide	1.8	U	1.8	U	NA		2.1	UJ	2	U	2	U	1.9	U	1.7	U	1.2	J	1.4	DR	1.9	U
Methoxychlor	18	UJ	18	U	NA		21	UJ	20	UJ	0.48	J	19	U	17	U	18	U	180	UR	19	U
Toxaphene	180	U	180	U	NA		210	UJ	200	U	200	U	190	U	170	U	180	U	1800	UR	190	U
Herbicides, ug/kg																						
2,4,5-T	NA		NA		NA		NA		NA		NA		9.3	U	0.4	J	8.6	U	NA		9.3	U
2,4,5-TP Silvex	NA		NA		NA		NA		NA		NA		9.3	U	8.5	U	8.6	U	NA		9.3	U
2,4-D	NA		NA		NA		NA		NA		NA		9.3	U	8.5	U	8.6	U	NA		9.3	U
2,4-DB	NA		NA		NA		NA		NA		NA		9.3	U	8.5	U	8.6	U	NA		9.3	U
Dalapon	NA		NA		NA		NA		NA		NA		2200	U	2000	U	2100	U	NA		2200	U
Dicamba	NA		NA		NA		NA		NA		NA		22	U	20	UJ	21	UJ	NA		22	UJ
Dichloroprop	NA		NA		NA		NA		NA		NA		110	U	100	U	100	U	NA		110	U
Dinoseb	NA		NA		NA		NA		NA		NA		110	U	100	UJ	100	UJ	NA		110	UJ
MCPA	NA		NA		NA		NA		NA		NA		2200	U	2000	U	2100	U	NA		2200	U
MCPP	NA		NA		NA		NA		NA		NA		2200	U	2000	U	2100	U	NA		2200	U
Inorganics, mg/kg																						

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101		30B00101D				30B00201		30B00301		30B00301D		30B00401		30B00501		30B00601				30B00701	
Lab ID	S776068*15		S776068*6		S776068*6*R		S776201*13		S776201*14		S776201*21		S776201*23		S776068*1		S776068*17		S776068*17*D		S776068*18	
Sampling Date	23-Oct-97		23-Oct-97		23-Oct-97		30-Oct-97		31-Oct-97		31-Oct-97		30-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97		24-Oct-97	
Aluminum	105		112		NA		415	J	224	J	247	J	205	J	19.1	U	975		NA		43.5	U
Antimony	0.72	U	0.72	U	NA		2.7	U	0.79	UJ	2.6	UJ	2.3	U	0.67	U	0.68	U	NA		0.74	U
Arsenic	0.78	U	0.78	U	NA		1.5	J	0.86	UJ	2.3	J	1.5	J	0.73	U	0.74	U	NA		0.81	U
Barium	0.42	U	0.44	U	NA		0.75	UJ	0.47	UJ	0.69	UJ	0.89	UJ	0.91	J	10.5	J	NA		0.9	U
Beryllium	0.04	U	0.04	U	NA		0.05	U	0.05	U	0.05	U	0.04	U	0.04	U	0.04	U	NA		0.04	U
Cadmium	0.13	U	0.13	U	NA		0.15	U	0.14	U	0.14	U	0.13	U	0.12	U	0.12	U	NA		0.13	U
Calcium	654	J	1120	J	NA		83.3	J	2940	J	1140	J	103	J	578	J	7770		NA		1550	
Chromium	0.56	J	0.69	J	NA		2.5		1.8	J	2.3	J	2.2	J	0.41	U	4		NA		1.3	J
Cobalt	0.22	U	0.22	U	NA		0.89	J	0.3	J	1	J	0.73	J	0.2	U	0.21	U	NA		0.22	U
Copper	0.65	J	0.48	UJ	NA		0.63	J	0.52	U	0.52	U	0.74	J	0.45	U	1.4	J	NA		0.49	U
Iron	17.6	J	12.2	J	NA		16.9	J	25.1	J	22.4	J	17.6	J	7.2	U	1390		NA		13	J
Lead	0.59	J	1	J	NA		0.74	J	0.58	J	0.53	J	1.1	J	0.59	J	52.2	J	NA		4.6	J
Magnesium	20.7	J	16.8	U	NA		9.4	U	25	J	19.4	J	11.1	J	3.1	U	229	U	NA		13.4	U
Manganese	0.53	U	0.41	U	NA		0.44	J	0.51	U	0.44	U	0.38	U	0.35	U	55.1		NA		0.64	U
Mercury	0.02	U	0.02	U	NA		0.03	U	0.03	U	0.03	U	0.03	J	0.03	U	0.04	J	NA		0.03	U
Nickel	0.5	U	0.5	U	NA		0.57	U	6	U	6.8	U	0.52	U	0.47	U	0.47	U	NA		0.52	U
Potassium	15.7	U	23.4	U	NA		13.3	U	12.9	U	12.7	U	12.8	U	11	U	46	U	NA		15.9	U
Selenium	0.57	U	0.57	U	NA		0.79	J	0.62	UJ	1.3	J	0.58	U	0.53	U	0.54	U	NA		0.93	U
Silver	0.65	U	0.65	U	NA		1.1	J	0.71	UJ	1.5	J	0.97	J	0.61	U	0.62	U	NA		0.67	U
Sodium	30	UJ	68.5	UJ	NA		49.9	UJ	63.1	UJ	49.6	UJ	40.2	UJ	31	UJ	90.1	UJ	NA		47.6	UJ
Thallium	1	U	1	U	NA		1.2	U	1.1	U	1.1	U	1.3	J	0.96	U	0.97	U	NA		1.1	U
Vanadium	0.76	U	0.66	U	NA		0.5	J	0.4	U	0.4	U	0.38	U	0.6	U	3.9	U	NA		0.38	U
Zinc	0.9	J	0.27	UJ	NA		0.22	UJ	0.43	UJ	0.38	UJ	0.35	UJ	0.2	J	71.3		NA		0.48	U
General Chemistry, mg/kg																						
TRPH	10	U	NA		NA		13		28		NA		13		10	U	45		NA		10	U

Notes for Summary of Analytical Results Tables
Study Area 30

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

Appendix C

Table C-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		1 DRUM 32B00101		1 DRUM 32B00201		32B00201D		1 DRUM 32B00301	
Sampling Date									10-Nov-97		10-Nov-97		10-Nov-97		10-Nov-97	
Pesticides/PCBs, ug/kg																
alpha-Chlordane			NA		490	c	4,400	c							0.14	J
Dieldrin			NA		40	c	360	c							0.22	J
gamma-Chlordane			NA		490	c	4,400	c							0.11	J
Methoxychlor			NA		390,000	n	10,000,000	n					0.84	J		
Inorganics, mg/kg																
Aluminum	2,119		NA		78,000	n	1,000,000	n	1720		426		388		1580	
Beryllium	ND		NA		0.15	c	1.3	c	0.05	J						
Chromium	4		NA		390	n	10,000	n	4.9						3.1	
Iron	264		NA		23,000	n	610,000	n	80.1		227		278		63.1	
Mercury	ND		NA		23	n	610	n	0.05	J					0.14	
Vanadium	3.4		NA		550	n	14,000	n	0.54	J	0.48	J	0.5	J	0.58	J
General Chemistry, mg/kg																
TRPH	ND		ND		ND		ND						NA		12	

Appendix C
Table C-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.
[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). For detected compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.
[3] RBC = Risk-Based Concentration Table, USEPA Region III, October 1997, R.L. Smith.

n = noncarcinogenic pathway
c = carcinogenic pathway
NA = Not applicable (for SCGs) or not analyzed.
ND = Not determined.
TRPH = Total Recoverable Petroleum Hydrocarbons
mg/kg = milligrams per kilogram.
ug/kg = micrograms per kilogram.
OSWER = Office of Solid Waste and Emergency Response.
USEPA = U.S. Environmental Protection Agency.
J = Reported concentration is an estimated quantity.
All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

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Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	32B00101		32B00201		32B00201D		32B00301	
Lab ID	S776391*5		S776391*4		S776391*17		S776391*6	
Sampling Date	10-Nov-97		10-Nov-97		10-Nov-97		10-Nov-97	
Volatile organics, ug/kg								
1,1,1-Trichloroethane	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	11	U	11	U	11	U	11	U
1,1-Dichloroethane	11	U	11	U	11	U	11	U
1,1-Dichloroethene	11	U	11	U	11	U	11	U
1,2-Dichloroethane	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	11	U	11	U	11	U	11	U
1,2-Dichloropropane	11	U	11	U	11	U	11	U
2-Butanone	11	U	11	U	11	U	11	U
2-Hexanone	11	U	11	U	11	U	11	U
4-Methyl-2-pentanone	11	U	11	U	11	U	11	U
Acetone	11	U	11	U	11	UJ	11	U
Benzene	11	U	11	U	11	U	11	U
Bromodichloromethane	11	U	11	U	11	U	11	U
Bromoform	11	U	11	U	11	U	11	U
Bromomethane	11	U	11	U	11	U	11	U
Carbon disulfide	11	U	11	U	11	U	11	U
Carbon tetrachloride	11	U	11	U	11	U	11	U
Chlorobenzene	11	U	11	U	11	U	11	U
Chloroethane	11	U	11	U	11	U	11	U
Chloroform	11	U	11	U	11	U	11	U
Chloromethane	11	U	11	U	11	U	11	U
cis-1,3-Dichloropropene	11	U	11	U	11	U	11	U
Dibromochloromethane	11	U	11	U	11	U	11	U
Ethylbenzene	11	U	11	U	11	U	11	U
Methylene chloride	11	U	11	U	11	U	11	U
Styrene	11	U	11	U	11	U	11	U
Tetrachloroethene	11	U	11	U	11	U	11	U
Toluene	11	U	11	U	11	U	11	U
trans-1,3-Dichloropropene	11	U	11	U	11	U	11	U
Trichloroethene	11	U	11	U	11	U	11	U
Vinyl chloride	11	U	11	U	11	U	11	U
Xylene (total)	11	U	11	U	11	U	11	U
Semivolatile organics, ug/L								
1,2,4-Trichlorobenzene	380	U	360	U	360	U	380	U
1,2-Dichlorobenzene	380	U	360	U	360	U	380	U
1,3-Dichlorobenzene	380	U	360	U	360	U	380	U
1,4-Dichlorobenzene	380	U	360	U	360	U	380	U
2,2'-oxybis(1-Chloropropane)	380	U	360	U	360	U	380	U
2,4,5-Trichlorophenol	940	U	900	U	900	U	940	U
2,4,6-Trichlorophenol	380	U	360	U	360	U	380	U
2,4-Dichlorophenol	380	U	360	U	360	U	380	U
2,4-Dimethylphenol	380	U	360	U	360	U	380	U
2,4-Dinitrophenol	940	U	900	U	900	U	940	U
2,4-Dinitrotoluene	380	U	360	U	360	U	380	U
2,6-Dinitrotoluene	380	U	360	U	360	U	380	U
2-Chloronaphthalene	380	U	360	U	360	U	380	U
2-Chlorophenol	380	U	360	U	360	U	380	U
2-Methylnaphthalene	380	U	360	U	360	U	380	U
2-Methylphenol	380	U	360	U	360	U	380	U
2-Nitroaniline	940	U	900	U	900	U	940	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	32B00101		32B00201		32B00201D		32B00301	
Lab ID	S776391*5		S776391*4		S776391*17		S776391*6	
Sampling Date	10-Nov-97		10-Nov-97		10-Nov-97		10-Nov-97	
2-Nitrophenol	380	U	360	U	360	U	380	U
3,3'-Dichlorobenzidine	380	U	360	U	360	U	380	U
3-Methylphenol/4-Methylphenol	380	U	360	U	360	U	380	U
3-Nitroaniline	940	U	900	U	900	U	940	U
4,6-Dinitro-2-methylphenol	940	U	900	U	900	U	940	U
4-Bromophenyl-phenylether	380	U	360	U	360	U	380	U
4-Chloro-3-methylphenol	380	U	360	U	360	U	380	U
4-Chloroaniline	380	U	360	U	360	U	380	U
4-Chlorophenyl-phenylether	380	U	360	U	360	U	380	U
4-Nitroaniline	940	U	900	U	900	U	940	U
4-Nitrophenol	940	UJ	900	UJ	900	UJ	940	UJ
Acenaphthene	380	U	360	U	360	U	380	U
Acenaphthylene	380	U	360	U	360	U	380	U
Anthracene	380	U	360	U	360	U	380	U
Benzo(a)anthracene	380	U	360	U	360	U	380	U
Benzo(a)pyrene	380	U	360	U	360	U	380	U
Benzo(b)fluoranthene	380	U	360	U	360	U	380	U
Benzo(g,h,i)perylene	380	U	360	U	360	U	380	U
Benzo(k)fluoranthene	380	U	360	U	360	U	380	U
bis(2-Chloroethoxy)methane	380	U	360	U	360	U	380	U
bis(2-Chloroethyl)ether	380	U	360	U	360	U	380	U
bis(2-Ethylhexyl)phthalate	380	UJ	360	UJ	360	UJ	380	UJ
Butylbenzylphthalate	380	U	360	U	360	U	380	U
Carbazole	380	U	360	U	360	U	380	U
Chrysene	380	U	360	U	360	U	380	U
Di-n-butylphthalate	380	U	360	U	360	U	380	U
Di-n-octylphthalate	380	UJ	360	UJ	360	UJ	380	UJ
Dibenz(a,h)anthracene	380	U	360	U	360	U	380	U
Dibenzofuran	380	U	360	U	360	U	380	U
Diethylphthalate	380	UJ	360	UJ	360	UJ	380	UJ
Dimethylphthalate	380	U	360	U	360	U	380	U
Fluoranthene	380	U	360	U	360	U	380	U
Fluorene	380	U	360	U	360	U	380	U
Hexachlorobenzene	380	U	360	U	360	U	380	U
Hexachlorobutadiene	380	U	360	U	360	U	380	U
Hexachlorocyclopentadiene	380	U	360	U	360	U	380	U
Hexachloroethane	380	U	360	U	360	U	380	U
Indeno(1,2,3-cd)pyrene	380	U	360	U	360	U	380	U
Isophorone	380	U	360	U	360	U	380	U
N-Nitroso-di-n-propylamine	380	U	360	U	360	U	380	U
N-Nitrosodiphenylamine	380	U	360	U	360	U	380	U
Naphthalene	380	U	360	U	360	U	380	U
Nitrobenzene	380	U	360	U	360	U	380	U
Pentachlorophenol	940	U	900	U	900	U	940	U
Phenanthrene	380	U	360	U	360	U	380	U
Phenol	380	U	360	U	360	U	380	U
Pyrene	380	U	360	U	360	U	380	U
Pesticides/PCBs, ug/kg								
4,4'-DDD	3.7	U	3.6	U	3.6	U	3.7	U
4,4'-DDE	3.7	U	3.6	U	3.6	U	3.7	U
4,4'-DDT	3.7	U	3.6	U	3.6	U	3.7	U
Aldrin	1.9	U	1.8	U	1.8	U	1.9	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	32B00101		32B00201		32B00201D		32B00301	
Lab ID	S776391*5		S776391*4		S776391*17		S776391*6	
Sampling Date	10-Nov-97		10-Nov-97		10-Nov-97		10-Nov-97	
alpha-BHC	1.9	U	1.8	U	1.8	U	1.9	U
alpha-Chlordane	1.9	U	1.8	U	1.8	U	0.14	J
Aroclor-1016	38	U	36	U	36	U	38	U
Aroclor-1221	76	U	73	U	73	U	76	U
Aroclor-1232	38	U	36	U	36	U	38	U
Aroclor-1242	38	U	36	U	36	U	38	U
Aroclor-1248	38	U	36	U	36	U	38	U
Aroclor-1254	38	U	36	U	36	U	38	U
Aroclor-1260	38	U	36	U	36	U	38	U
beta-BHC	1.9	U	1.8	U	1.8	U	1.9	U
delta-BHC	1.9	U	1.8	U	1.8	U	1.9	U
Dieldrin	3.7	U	3.6	U	3.6	U	0.22	J
Endosulfan I	1.9	U	1.8	U	1.8	U	1.9	U
Endosulfan II	3.7	U	3.6	U	3.6	U	3.7	U
Endosulfan sulfate	3.7	U	3.6	U	3.6	U	3.7	U
Endrin	3.7	U	3.6	U	3.6	U	3.7	U
Endrin aldehyde	3.7	U	3.6	U	3.6	U	3.7	U
Endrin ketone	3.7	U	3.6	U	3.6	U	3.7	U
gamma-BHC (Lindane)	1.9	U	1.8	U	1.8	U	1.9	U
gamma-Chlordane	1.9	U	1.8	UJ	1.8	UJ	0.11	J
Heptachlor	1.9	U	1.8	U	1.8	U	1.9	U
Heptachlor epoxide	1.9	U	1.8	U	1.8	U	1.9	U
Methoxychlor	19	U	18	UJ	0.84	J	19	U
Toxaphene	190	U	180	U	180	U	190	U
Inorganics, mg/kg								
Aluminum	1720		426		388		1580	
Antimony	0.75	U	0.72	U	0.72	U	0.75	U
Arsenic	0.82	U	0.78	U	0.78	U	0.82	U
Barium	0.37	U	0.25	U	0.32	U	0.47	U
Beryllium	0.05	J	0.04	U	0.04	U	0.05	U
Cadmium	0.14	U	0.13	U	0.13	U	0.14	U
Calcium	1670	U	277	U	221	U	580	U
Chromium	4.9		1.2	U	1.4	U	3.1	
Cobalt	0.23	U	0.22	U	0.22	U	0.23	U
Copper	0.66	U	0.48	U	0.48	U	0.5	U
Iron	80.1		227		278		63.1	
Lead	1.9	U	0.79	U	0.9	U	1.4	U
Magnesium	26.2	U	6.6	U	7.2	U	22.7	U
Manganese	0.43	U	0.32	U	0.36	U	0.64	U
Mercury	0.05	J	0.02	U	0.02	U	0.14	
Nickel	0.52	U	0.5	U	0.5	U	0.52	U
Potassium	11.6	U	8.7	U	9.6	UJ	9.1	U
Selenium	0.59	U	0.57	U	0.57	U	0.59	U
Silver	0.68	U	0.65	U	0.65	U	0.68	U
Sodium	8.6	UJ	13	UJ	14	UJ	12.6	UJ
Thallium	1.1	U	1	U	1	U	1.1	U
Vanadium	0.54	J	0.48	J	0.5	J	0.58	J
Zinc	0.58	U	0.56	UJ	0.33	UJ	0.53	U
General Chemistry, mg/kg								
TRPH	11	U	11	U	NA		12	

Notes for Summary of Analytical Results Tables
Study Area 32

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results

Study Area 35

Naval Training Center, Orlando

Orlando, FL

	Background Screening [1]		SCG for Residential Soil [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		1 DRUM		1 DRUM		1 DRUM		1 DRUM		1 DRUM	
									35B00101		35B00201		35B00301		35B00401		35B00501	
									31-Oct-97		31-Oct-97		31-Oct-97		10-Nov-97		10-Nov-97	
Semivolatile Organics, ug/kg																		
Diethylphthalate															48	J		
Pesticides/PCBs, ug/kg																		
4,4'-DDD			NA		2,700	c	24,000	c			0.29	J						
4,4'-DDE			NA		1,900	c	17,000	c	0.2	J					0.62	J		
4,4'-DDT			NA		1,900	c	17,000	c	0.16	J					0.86	J		
alpha-Chlordane			NA		490	c	4,400	c									0.23	J
delta-BHC			NA		350	c	3,200	c			0.1	J						
Dieldrin			NA		40	c	360	c	0.23	J								
gamma-BHC (Lindane)			NA		490	c	4,400	c									0.08	J
gamma-Chlordane			NA		490	c	4,400	c	0.11	J								
Heptachlor			NA		140	c	1,300	c	0.07	J								
Methoxychlor			NA		390,000	n	10,000,000	n	0.59	J							0.51	J
Inorganics, mg/kg																		
Aluminum	2,119		NA		78,000	n	1,000,000	n	5290	J	3420	J	4640	J	3760		2910	
Arsenic	1.1		NA		0.43 /23	c/n	3.8 c/610	c/n	1.3	J	1.5	J	1.3	J				
Barium	3.6		NA		5,500	n	140,000	n					24.6	J				
Beryllium	ND		NA		0.15	c	1.3	c	0.07	J	0.06	J	0.08	J	0.06	J	0.05	J
Calcium	115		NA		1000000		1000000		4320		205	J	176	J				
Chromium	4		NA		390	n	10,000	n	10.1		12.1		9.3		8.5		10.2	
Cobalt	2		NA		4,700	n	120,000	n	0.64	J	0.78	J	0.53	J				
Copper	ND		NA		270,000	n	1,000,000	n			1	J	0.99	J				
Iron	264		NA		23,000	n	610,000	n	201	J	51.6	J	41.6	J	37.5		69	
Lead	3.9		NA		400		400		6.3	J	11.5	J	3	J	14.2		5.7	
Magnesium	32.8		NA		460,468		460,468		48.9	J	25.4	J	15.2	J				
Mercury	ND		NA		23	n	610	n	0.09		0.09		0.05	J	0.16		0.15	
Nickel	ND		NA		1,600	n	41,000	n	20.9									
Selenium	1.3		NA		390	n	10,000	n	1.3				0.94	J				
Silver	ND		NA		390	n	10,000	n	0.69	J	1.1	J						
Vanadium	3.4		NA		550	n	14,000	n	1.4	J	0.87	J	1.1	J	0.54	J	0.43	J
General Chemistry, mg/kg																		
pH	ND		ND		ND		ND		NA		NA		NA		NA		8	
TRPH	ND		ND		ND		ND		110		15		11		11		18	

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 35

Naval Training Center, Orlando
Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.
[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). For detected analytes and compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.
[3] RBC = Risk-Based Concentration Table, USEPA Region III, March 1997, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, potassium, sodium, magnesium) screening values were derived based on recommended daily allowances (RDAs).

n = noncarcinogenic pathway
c = carcinogenic pathway
NA = Not applicable (for SCGs) or not analyzed.
ND = Not determined.
mg/kg = milligrams per kilogram.
ug/kg = micrograms per kilogram.
OSWER = Office of Solid Waste and Emergency Response.
USEPA = U.S. Environmental Protection Agency.
J = Reported concentration is an estimated quantity.
All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

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Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	35B00101		35B00201		35B00301		35B00401		35B00501	
Lab ID	S776201*20		S776201*18		S776201*16		S776391*8		S776391*21	
Sampling Date	31-Oct-97		31-Oct-97		31-Oct-97		10-Nov-97		10-Nov-97	
Volatile organics, ug/kg										
1,1,1-Trichloroethane	11	U	11	U	11	U	12	U	11	U
1,1,2,2-Tetrachloroethane	11	U	11	U	11	U	12	U	11	U
1,1,2-Trichloroethane	11	U	11	U	11	U	12	U	11	U
1,1-Dichloroethane	11	U	11	U	11	U	12	U	11	U
1,1-Dichloroethene	11	U	11	U	11	U	12	U	11	U
1,2-Dichloroethane	11	U	11	U	11	U	12	U	11	U
1,2-Dichloroethene (total)	11	U	11	U	11	U	12	U	11	U
1,2-Dichloropropane	11	U	11	U	11	U	12	U	11	U
2-Butanone	11	UJ	11	UJ	11	UJ	12	U	11	U
2-Hexanone	11	U	11	U	11	U	12	U	11	U
4-Methyl-2-pentanone	11	U	11	U	11	U	12	U	11	U
Acetone	11	U	11	U	11	U	12	U	11	UJ
Benzene	11	U	11	U	11	U	12	U	11	U
Bromodichloromethane	11	U	11	U	11	U	12	U	11	U
Bromoform	11	U	11	U	11	U	12	U	11	U
Bromomethane	11	U	11	U	11	U	12	U	11	U
Carbon disulfide	11	U	11	U	11	U	12	U	11	U
Carbon tetrachloride	11	U	11	U	11	U	12	U	11	U
Chlorobenzene	11	U	11	U	11	U	12	U	11	U
Chloroethane	11	U	11	U	11	U	12	U	11	U
Chloroform	11	U	11	U	11	U	12	U	11	U
Chloromethane	11	U	11	U	11	U	12	U	11	U
cis-1,3-Dichloropropene	11	U	11	U	11	U	12	U	11	U
Dibromochloromethane	11	U	11	U	11	U	12	U	11	U
Ethylbenzene	11	U	11	U	11	U	12	U	11	U
Methylene chloride	11	U	11	U	11	U	12	U	11	U
Styrene	11	U	11	U	11	U	12	U	11	U
Tetrachloroethene	11	U	11	U	11	U	12	U	11	U
Toluene	11	U	11	U	11	U	12	U	11	U
trans-1,3-Dichloropropene	11	U	11	U	11	U	12	U	11	U
Trichloroethene	11	U	11	U	11	U	12	U	11	U
Vinyl chloride	11	U	11	U	11	U	12	U	11	U
Xylene (total)	11	U	11	U	11	U	12	U	11	U
Semivolatile organics, ug/kg										
1,2,4-Trichlorobenzene	370	U	370	U	370	U	380	U	370	U
1,2-Dichlorobenzene	370	U	370	U	370	U	380	U	370	U
1,3-Dichlorobenzene	370	U	370	U	370	U	380	U	370	U
1,4-Dichlorobenzene	370	U	370	U	370	U	380	U	370	U
2,2'-oxybis(1-Chloropropane)	370	U	370	U	370	U	380	U	370	UJ
2,4,5-Trichlorophenol	920	U	920	U	930	U	960	U	920	U
2,4,6-Trichlorophenol	370	U	370	U	370	U	380	U	370	U
2,4-Dichlorophenol	370	U	370	U	370	U	380	U	370	U
2,4-Dimethylphenol	370	U	370	U	370	U	380	U	370	U
2,4-Dinitrophenol	920	U	920	U	930	U	960	U	920	UJ
2,4-Dinitrotoluene	370	U	370	U	370	U	380	U	370	U
2,6-Dinitrotoluene	370	U	370	U	370	U	380	U	370	U
2-Chloronaphthalene	370	U	370	U	370	U	380	U	370	U
2-Chlorophenol	370	U	370	U	370	U	380	U	370	U
2-Methylnaphthalene	370	U	370	U	370	U	380	U	370	U
2-Methylphenol	370	U	370	U	370	U	380	U	370	U
2-Nitroaniline	920	U	920	U	930	U	960	U	920	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

2-Nitrophenol	370	U	370	U	370	U	380	U	370	U
3,3'-Dichlorobenzidine	370	U	370	U	370	U	380	U	370	U
3-Methylphenol/4-Methylphenol	370	U	370	U	370	U	380	U	370	U
3-Nitroaniline	920	U	920	U	930	U	960	U	920	U
4,6-Dinitro-2-methylphenol	920	U	920	U	930	U	960	U	920	U
4-Bromophenyl-phenylether	370	U	370	U	370	U	380	U	370	U
4-Chloro-3-methylphenol	370	U	370	U	370	U	380	U	370	UJ
4-Chloroaniline	370	UJ	370	UJ	370	UJ	380	U	370	U
4-Chlorophenyl-phenylether	370	U	370	U	370	U	380	U	370	U
4-Nitroaniline	920	U	920	U	930	U	960	U	920	U
4-Nitrophenol	920	U	920	U	930	U	960	UJ	920	UJ
Acenaphthene	370	U	370	U	370	U	380	U	370	U
Acenaphthylene	370	U	370	U	370	U	380	U	370	U
Anthracene	370	U	370	U	370	U	380	U	370	U
Benzo(a)anthracene	370	U	370	U	370	U	380	U	370	U
Benzo(a)pyrene	370	U	370	U	370	U	380	U	370	U
Benzo(b)fluoranthene	370	U	370	U	370	U	380	U	370	U
Benzo(g,h,i)perylene	370	U	370	U	370	U	380	U	370	U
Benzo(k)fluoranthene	370	U	370	U	370	U	380	U	370	U
bis(2-Chloroethoxy)methane	370	U	370	U	370	U	380	U	370	U
bis(2-Chloroethyl)ether	370	U	370	U	370	U	380	U	370	U
bis(2-Ethylhexyl)phthalate	370	U	370	U	370	U	380	UJ	370	UJ
Butylbenzylphthalate	370	U	370	U	370	U	380	U	370	UJ
Carbazole	370	U	370	U	370	U	380	U	370	U
Chrysene	370	U	370	U	370	U	380	U	370	U
Di-n-butylphthalate	370	U	370	U	370	U	380	U	370	U
Di-n-octylphthalate	370	U	370	U	370	U	380	UJ	370	U
Dibenz(a,h)anthracene	370	U	370	U	370	U	380	U	370	U
Dibenzofuran	370	U	370	U	370	U	380	U	370	U
Diethylphthalate	370	U	370	U	370	U	48	J	370	UJ
Dimethylphthalate	370	U	370	U	370	U	380	U	370	U
Fluoranthene	370	U	370	U	370	U	380	U	370	U
Fluorene	370	U	370	U	370	U	380	U	370	U
Hexachlorobenzene	370	U	370	U	370	U	380	U	370	U
Hexachlorobutadiene	370	U	370	U	370	U	380	U	370	UJ
Hexachlorocyclopentadiene	370	U	370	U	370	U	380	U	370	U
Hexachloroethane	370	U	370	U	370	U	380	U	370	U
Indeno(1,2,3-cd)pyrene	370	U	370	U	370	U	380	U	370	U
Isophorone	370	U	370	U	370	U	380	U	370	U
N-Nitroso-di-n-propylamine	370	U	370	U	370	U	380	U	370	U
N-Nitrosodiphenylamine	370	U	370	U	370	U	380	U	370	U
Naphthalene	370	U	370	U	370	U	380	U	370	U
Nitrobenzene	370	U	370	U	370	U	380	U	370	UJ
Pentachlorophenol	920	U	920	U	930	U	960	U	920	U
Phenanthrene	370	U	370	U	370	U	380	U	370	U
Phenol	370	U	370	U	370	U	380	U	370	U
Pyrene	370	U	370	U	370	U	380	U	370	U
Pesticides/PCBs, ug/kg										
4,4'-DDD	3.7	U	0.29	J	3.7	U	3.8	U	3.7	U
4,4'-DDE	0.2	J	3.7	U	3.7	U	0.62	J	3.7	U
4,4'-DDT	0.16	J	3.7	U	3.7	U	0.86	J	3.7	U
Aldrin	1.9	U	1.9	U	1.9	U	2	U	1.9	U
alpha-BHC	1.9	U	1.9	U	1.9	U	2	U	1.9	U
alpha-Chlordane	1.9	U	1.9	U	1.9	U	2	U	0.23	J
Aroclor-1016	37	U	37	U	37	U	38	U	37	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Aroclor-1221	74	U	74	U	75	U	78	U	74	U
Aroclor-1232	37	U	37	U	37	U	38	U	37	U
Aroclor-1242	37	U	37	U	37	U	38	U	37	U
Aroclor-1248	37	U	37	U	37	U	38	U	37	U
Aroclor-1254	37	U	37	U	37	U	38	U	37	U
Aroclor-1260	37	U	37	U	37	U	38	U	37	U
beta-BHC	1.9	U	1.9	U	1.9	U	2	U	1.9	U
delta-BHC	1.9	U	0.1	J	1.9	U	2	U	1.9	U
Dieldrin	0.23	J	3.7	U	3.7	U	3.8	U	3.7	U
Endosulfan I	1.9	U	1.9	U	1.9	U	2	U	1.9	U
Endosulfan II	3.7	U	3.7	U	3.7	U	3.8	U	3.7	U
Endosulfan sulfate	3.7	U	3.7	U	3.7	U	3.8	U	3.7	U
Endrin	3.7	U	3.7	U	3.7	U	3.8	U	3.7	U
Endrin aldehyde	3.7	U	3.7	U	3.7	U	3.8	U	3.7	U
Endrin ketone	3.7	U	3.7	U	3.7	U	3.8	U	3.7	U
gamma-BHC (Lindane)	1.9	U	1.9	U	1.9	U	2	U	0.08	J
gamma-Chlordane	0.11	J	1.9	U	1.9	U	2	U	1.9	U
Heptachlor	0.07	J	1.9	U	1.9	U	2	U	1.9	U
Heptachlor epoxide	1.9	U	1.9	U	1.9	U	2	U	1.9	U
Methoxychlor	0.59	J	19	U	19	U	20	U	0.51	J
Toxaphene	190	U	190	U	190	U	200	U	190	U
Inorganics, mg/kg										
Aluminum	5290	J	3420	J	4640	J	3760		2910	
Antimony	1.9	U	2.6	U	1.2	U	0.77	U	0.73	U
Arsenic	1.3	J	1.5	J	1.3	J	0.84	U	0.8	U
Barium	2.4	UJ	3.6	UJ	24.6	J	4.7	U	4.4	U
Beryllium	0.07	J	0.06	J	0.08	J	0.06	J	0.05	J
Cadmium	0.13	U	0.13	U	0.13	U	0.14	U	0.13	U
Calcium	4320		205	J	176	J	158	U	1010	U
Chromium	10.1		12.1		9.3		8.5		10.2	
Cobalt	0.64	J	0.78	J	0.53	J	0.23	U	0.22	U
Copper	0.49	U	1	J	0.99	J	0.76	U	1.1	U
Iron	201	J	51.6	J	41.6	J	37.5		69	
Lead	6.3	J	11.5	J	3	J	14.2		5.7	
Magnesium	48.9	J	25.4	J	15.2	J	11.2	U	45.1	U
Manganese	1.5	U	0.38	U	0.25	U	0.58	U	0.83	U
Mercury	0.09		0.09		0.05	J	0.16		0.15	
Nickel	20.9		0.75	U	0.54	U	0.53	U	0.51	U
Potassium	12	U	27.2	U	30.5	U	13.6	U	10.7	U
Selenium	1.3		0.58	U	0.94	J	0.6	U	0.58	U
Silver	0.69	J	1.1	J	0.67	U	0.7	U	0.67	U
Sodium	45.3	UJ	51	UJ	36	UJ	13.4	UJ	9	UJ
Thallium	1	U	1	U	1.1	U	1.1	U	1	U
Vanadium	1.4	J	0.87	J	1.1	J	0.54	J	0.43	J
Zinc	0.57	UJ	0.37	UJ	0.67	UJ	2.1	U	3.2	U
General Chemistry										
pH, units	NA		NA		NA		NA		8	
TRPH, mg/kg	110		15		11		11		18	

Notes for Summary of Analytical Results Tables
Study Area 32

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results

Study Area 36

Naval Training Center, Orlando

Orlando, FL

Sample ID		Background Screening [1]	SCG Leaching [2]	RBC [3] for Residential Soil	RBC [3] for Industrial Soil	36B00101	36B00201	36B00301	36B00401	36B00501	36B00
						1 DRUM	2 DRUMS	2 DRUMS	1 DRUM	1 DRUM	1 DRUM
Sampling Date						30-Oct-97	30-Oct-97	30-Oct-97	30-Oct-97	30-Oct-97	30-Oct
Semivolatile Organics, ug/kg											
Acenaphthene	Acenaphthene		NA	2,300,000 n	61,000,000 n				15 J		
Fluorene	Fluorene		NA	3,100,000 n	82,000,000 n				14 J		
Phenanthrene	Phenanthrene		NA	2,300,000 n	61,000,000 n				20 J		
Pesticides/PCBs, ug/kg											
4,4'-DDD	4,4'-DDD		NA	2,700 c	24,000 c	1.8 J					
4,4'-DDE	4,4'-DDE		NA	1,900 c	17,000 c	4.4 J					
alpha-Chlordane	alpha-Chlordane		NA	490 c	4,400 c	0.22 J					
beta-BHC	beta-BHC		NA	350 c	3,200 c	0.09 J					
Dieldrin	Dieldrin		NA	40 c	360 c	0.4 J			0.08 J		
Endrin ketone	Endrin ketone		NA	ND	ND	0.72 J		0.43 J	0.6 J	1.1 J	0.59
gamma-BHC (Lindane)	gamma-BHC (Lindane)		NA	490 c	4,400 c	0.07 J					
gamma-Chlordane	gamma-Chlordane		NA	490 c	4,400 c	0.5 J					0.32
Inorganics, mg/kg											
Aluminum	Aluminum	2,119	NA	78,000 n	1,000,000 n	520 J	251 J	103 J	76.9 J	561 J	674
Arsenic	Arsenic	1.1	NA	0.43 /23 c/n	3.8 c/610 c/n	1 J		0.86 J	1.2 J	2.2 J	
Cadmium	Cadmium	ND	NA	39 n	10,000 n		0.32 J				
Calcium	Calcium	115	NA	1000000	1000000	2540					
Chromium	Chromium	4	NA	390 n	10,000 n	1.8 J	1.2 J	1.4 J	1.6 J	3.1	2.3
Cobalt	Cobalt	2	NA	4,700 n	120,000 n	0.46 J	0.34 J	0.37 J	0.7 J	1.1 J	0.41
Lead	Lead	3.9	NA	400	400						3.2
Mercury	Mercury	ND	NA	23 n	610 n		0.05				0.03
Selenium	Selenium	1.3	NA	390 n	10,000 n	0.6 J	0.62 J		0.98 J	0.85 J	
Silver	Silver	ND	NA	390 n	10,000 n				1 J	1.3 J	
Thallium	Thallium									1.4 J	
Vanadium	Vanadium	3.4	NA	550 n	14,000 n	0.38 J				0.93 J	
General Chemistry											
TRPH	TRPH	ND	ND	ND	ND	160	18				38

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results

Study Area 36

Naval Training Center, Orlando

Orlando, FL

Sample ID		Background Screening [1]		SCG Leaching [2]		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		01
Sampling Date										97
Semivolatile Organics, ug/kg										
Acenaphthene	Acenaphthene			NA		2,300,000	n	61,000,000	n	
Fluorene	Fluorene			NA		3,100,000	n	82,000,000	n	
Phenanthrene	Phenanthrene			NA		2,300,000	n	61,000,000	n	
Pesticides/PCBs, ug/kg										
4,4'-DDD	4,4'-DDD			NA		2,700	c	24,000	c	
4,4'-DDE	4,4'-DDE			NA		1,900	c	17,000	c	
alpha-Chlordane	alpha-Chlordane			NA		490	c	4,400	c	
beta-BHC	beta-BHC			NA		350	c	3,200	c	
Dieldrin	Dieldrin			NA		40	c	360	c	
Endrin ketone	Endrin ketone			NA		ND		ND		J
gamma-BHC (Lindane)	gamma-BHC (Lindane)			NA		490	c	4,400	c	
gamma-Chlordane	gamma-Chlordane			NA		490	c	4,400	c	J
Inorganics, mg/kg										
Aluminum	Aluminum	2,119		NA		78,000	n	1,000,000	n	J
Arsenic	Arsenic	1.1		NA		0.43 /23	c/n	3.8 c/610	c/n	
Cadmium	Cadmium	ND		NA		39	n	10,000	n	
Calcium	Calcium	115		NA		1000000		1000000		
Chromium	Chromium	4		NA		390	n	10,000	n	
Cobalt	Cobalt	2		NA		4,700	n	120,000	n	J
Lead	Lead	3.9		NA		400		400		J
Mercury	Mercury	ND		NA		23	n	610	n	J
Selenium	Selenium	1.3		NA		390	n	10,000	n	
Silver	Silver	ND		NA		390	n	10,000	n	
Thallium	Thallium									
Vanadium	Vanadium	3.4		NA		550	n	14,000	n	
General Chemistry										
TRPH	TRPH	ND		ND		ND		ND		

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 36

Naval Training Center, Orlando
Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.
[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). For detected analytes and compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.
[3] RBC = Risk-Based Concentration Table, USEPA Region III, March 1997, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, potassium, sodium, magnesium) screening values were derived based on recommended daily allowances (RDAs).

n = noncarcinogenic pathway
c = carcinogenic pathway
NA = Not applicable (for SCGs) or not analyzed.
ND = Not determined.
mg/kg = milligrams per kilogram.
ug/kg = micrograms per kilogram.
OSWER = Office of Solid Waste and Emergency Response.
USEPA = U.S. Environmental Protection Agency.
J = Reported concentration is an estimated quantity.
All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

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Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	36B00101		36B00201		36B00301		36B00401		36B00501		36B00601	
Lab ID	S776201*2		S776201*4		S776201*12		S776201*8		S776201*10		S776201*6	
Sampling Date	30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97	
Volatile organics, ug/kg												
1,1,1-Trichloroethane	10	U	11	U	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	10	U	11	U	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	10	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethane	10	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	10	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	10	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	10	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	10	U	11	U	11	U	11	U	11	U	11	U
2-Butanone	10	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
2-Hexanone	10	U	11	U	11	U	11	U	11	U	11	U
4-Methyl-2-pentanone	10	U	11	U	11	U	11	U	11	U	11	U
Acetone	10	U	11	U	11	U	11	U	11	U	11	U
Benzene	10	U	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	10	U	11	U	11	U	11	U	11	U	11	U
Bromoform	10	U	11	U	11	U	11	U	11	U	11	U
Bromomethane	10	U	11	U	11	U	11	U	11	U	11	U
Carbon disulfide	10	U	11	U	11	U	11	U	11	U	11	U
Carbon tetrachloride	10	U	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	10	U	11	U	11	U	11	U	11	U	11	U
Chloroethane	10	U	11	U	11	U	11	U	11	U	11	U
Chloroform	10	U	11	U	11	U	11	U	11	U	11	U
Chloromethane	10	U	11	U	11	U	11	U	11	U	11	U
cis-1,3-Dichloropropene	10	U	11	U	11	U	11	U	11	U	11	U
Dibromochloromethane	10	U	11	U	11	U	11	U	11	U	11	U
Ethylbenzene	10	U	11	U	11	U	11	U	11	U	11	U
Methylene chloride	10	U	11	U	11	U	11	U	11	U	11	U
Styrene	10	U	11	U	11	U	11	U	11	U	11	U
Tetrachloroethene	10	U	11	U	11	U	11	U	11	U	11	U
Toluene	10	U	11	U	11	U	11	U	11	U	11	U
trans-1,3-Dichloropropene	10	U	11	U	11	U	11	U	11	U	11	U
Trichloroethene	10	U	11	U	11	U	11	U	11	U	11	U
Vinyl chloride	10	U	11	U	11	U	11	U	11	U	11	U
Xylene (total)	10	U	11	U	11	U	11	U	11	U	11	U
Semivolatile organics, ug/kg												
1,2,4-Trichlorobenzene	350	U	360	U	360	U	350	U	360	U	360	U
1,2-Dichlorobenzene	350	U	360	U	360	U	350	U	360	U	360	U
1,3-Dichlorobenzene	350	U	360	U	360	U	350	U	360	U	360	U
1,4-Dichlorobenzene	350	U	360	U	360	U	350	U	360	U	360	U
2,2'-oxybis(1-Chloropropane)	350	U	360	U	360	U	350	U	360	U	360	U
2,4,5-Trichlorophenol	870	U	900	U	910	U	880	U	910	U	900	U
2,4,6-Trichlorophenol	350	U	360	U	360	U	350	U	360	U	360	U
2,4-Dichlorophenol	350	U	360	U	360	U	350	U	360	U	360	U
2,4-Dimethylphenol	350	U	360	U	360	U	350	U	360	U	360	U
2,4-Dinitrophenol	870	U	900	U	910	U	880	U	910	U	900	U
2,4-Dinitrotoluene	350	U	360	U	360	U	350	U	360	U	360	U
2,6-Dinitrotoluene	350	U	360	U	360	U	350	U	360	U	360	U
2-Chloronaphthalene	350	U	360	U	360	U	350	U	360	U	360	U
2-Chlorophenol	350	U	360	U	360	U	350	U	360	U	360	U
2-Methylnaphthalene	350	U	360	U	360	U	350	U	360	U	360	U
2-Methylphenol	350	U	360	U	360	U	350	U	360	U	360	U
2-Nitroaniline	870	U	900	U	910	U	880	U	910	U	900	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	36B00101		36B00201		36B00301		36B00401		36B00501		36B00601	
Lab ID	S776201*2		S776201*4		S776201*12		S776201*8		S776201*10		S776201*6	
Sampling Date	30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97	
2-Nitrophenol	350	U	360	U	360	U	350	U	360	U	360	U
3,3'-Dichlorobenzidine	350	UJ	360	UJ	360	U	350	UJ	360	U	360	UJ
3-Methylphenol/4-Methylphenol	350	U	360	U	360	U	350	U	360	U	360	U
3-Nitroaniline	870	UJ	900	UJ	910	U	880	UJ	910	U	900	UJ
4,6-Dinitro-2-methylphenol	870	U	900	U	910	U	880	U	910	U	900	U
4-Bromophenyl-phenylether	350	U	360	U	360	U	350	U	360	U	360	U
4-Chloro-3-methylphenol	350	U	360	U	360	U	350	U	360	U	360	U
4-Chloroaniline	350	UJ	360	UJ	360	UJ	350	UJ	360	UJ	360	UJ
4-Chlorophenyl-phenylether	350	U	360	U	360	U	350	U	360	U	360	U
4-Nitroaniline	870	U	900	U	910	U	880	U	910	U	900	U
4-Nitrophenol	870	U	900	U	910	U	880	U	910	U	900	U
Acenaphthene	350	U	360	U	360	U	15	J	360	U	360	U
Acenaphthylene	350	U	360	U	360	U	350	U	360	U	360	U
Anthracene	350	U	360	U	360	U	350	U	360	U	360	U
Benzo(a)anthracene	350	U	360	U	360	U	350	U	360	U	360	U
Benzo(a)pyrene	350	U	360	U	360	U	350	U	360	U	360	U
Benzo(b)fluoranthene	350	U	360	U	360	U	350	U	360	U	360	U
Benzo(g,h,i)perylene	350	U	360	U	360	U	350	U	360	U	360	U
Benzo(k)fluoranthene	350	U	360	U	360	U	350	U	360	U	360	U
bis(2-Chloroethoxy)methane	350	U	360	U	360	U	350	U	360	U	360	U
bis(2-Chloroethyl)ether	350	U	360	U	360	U	350	U	360	U	360	U
bis(2-Ethylhexyl)phthalate	350	U	360	U	360	U	350	U	360	U	360	U
Butylbenzylphthalate	350	U	360	U	360	U	350	U	360	U	360	U
Carbazole	350	U	360	U	360	U	350	U	360	U	360	U
Chrysene	350	U	360	U	360	U	350	U	360	U	360	U
Di-n-butylphthalate	350	U	360	U	360	U	350	U	360	U	360	U
Di-n-octylphthalate	350	U	360	U	360	U	350	U	360	U	360	U
Dibenz(a,h)anthracene	350	U	360	U	360	U	350	U	360	U	360	U
Dibenzofuran	350	U	360	U	360	U	350	U	360	U	360	U
Diethylphthalate	350	U	360	U	360	U	350	U	360	U	360	U
Dimethylphthalate	350	U	360	U	360	U	350	U	360	U	360	U
Fluoranthene	350	U	360	U	360	U	350	U	360	U	360	U
Fluorene	350	U	360	U	360	U	14	J	360	U	360	U
Hexachlorobenzene	350	U	360	U	360	U	350	U	360	U	360	U
Hexachlorobutadiene	350	U	360	U	360	U	350	U	360	U	360	U
Hexachlorocyclopentadiene	350	U	360	U	360	U	350	U	360	U	360	U
Hexachloroethane	350	U	360	U	360	U	350	U	360	U	360	U
Indeno(1,2,3-cd)pyrene	350	U	360	U	360	U	350	U	360	U	360	U
Isophorone	350	U	360	U	360	U	350	U	360	U	360	U
N-Nitroso-di-n-propylamine	350	U	360	U	360	U	350	U	360	U	360	U
N-Nitrosodiphenylamine	350	U	360	U	360	U	350	U	360	U	360	U
Naphthalene	350	U	360	U	360	U	350	U	360	U	360	U
Nitrobenzene	350	U	360	U	360	U	350	U	360	U	360	U
Pentachlorophenol	870	U	900	U	910	U	880	U	910	U	900	U
Phenanthrene	350	U	360	U	360	U	20	J	360	U	360	U
Phenol	350	U	360	U	360	U	350	U	360	U	360	U
Pyrene	350	U	360	U	360	U	350	U	360	U	360	U
Pesticides/PCBs, ug/kg												
4,4'-DDD	1.8	J	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
4,4'-DDE	4.4	J	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
4,4'-DDT	3.5	U	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
Aldrin	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 32

Naval Training Center, Orlando
Orlando, FL

Sample ID	36B00101		36B00201		36B00301		36B00401		36B00501		36B00601	
Lab ID	S776201*2		S776201*4		S776201*12		S776201*8		S776201*10		S776201*6	
Sampling Date	30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97		30-Oct-97	
alpha-BHC	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
alpha-Chlordane	0.22	J	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
Aroclor-1016	35	U	36	U	36	UJ	35	U	36	U	36	U
Aroclor-1221	70	U	73	U	74	UJ	71	U	74	U	73	U
Aroclor-1232	35	U	36	U	36	UJ	35	U	36	U	36	U
Aroclor-1242	35	U	36	U	36	UJ	35	U	36	U	36	U
Aroclor-1248	35	U	36	U	36	UJ	35	U	36	U	36	U
Aroclor-1254	35	U	36	U	36	UJ	35	U	36	U	36	U
Aroclor-1260	35	U	36	U	36	UJ	35	U	36	U	36	U
beta-BHC	0.09	J	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
delta-BHC	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
Dieldrin	0.4	J	3.6	U	3.6	UJ	0.08	J	3.6	U	3.6	U
Endosulfan I	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
Endosulfan II	3.5	U	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
Endosulfan sulfate	3.5	U	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
Endrin	3.5	U	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
Endrin aldehyde	3.5	U	3.6	U	3.6	UJ	3.5	U	3.6	U	3.6	U
Endrin ketone	0.72	J	3.6	U	0.43	J	0.6	J	1.1	J	0.59	J
gamma-BHC (Lindane)	0.07	J	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
gamma-Chlordane	0.5	J	1.8	UJ	1.9	UJ	1.8	U	1.9	U	0.32	J
Heptachlor	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
Heptachlor epoxide	1.8	U	1.8	U	1.9	UJ	1.8	U	1.9	U	1.8	U
Methoxychlor	18	U	18	UJ	19	UJ	18	U	19	U	18	U
Toxaphene	180	U	180	U	190	UJ	180	U	190	U	180	U
Inorganics, mg/kg												
Aluminum	520	J	251	J	103	J	76.9	J	561	J	674	J
Antimony	3.2	U	1	U	0.73	U	2.3	U	2.7	U	0.72	U
Arsenic	1	J	0.78	U	0.86	J	1.2	J	2.2	J	0.78	U
Barium	0.75	UJ	0.21	UJ	0.43	UJ	0.32	UJ	0.6	UJ	0.46	UJ
Beryllium	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Cadmium	0.13	U	0.32	J	0.13	U	0.13	U	0.13	U	0.13	U
Calcium	2540		125	U	54.8	U	30.2	U	202	U	1060	U
Chromium	1.8	J	1.2	J	1.4	J	1.6	J	3.1		2.3	
Cobalt	0.46	J	0.34	J	0.37	J	0.7	J	1.1	J	0.41	J
Copper	0.46	U	0.48	U	0.48	U	0.47	U	1.1	U	0.48	U
Iron	35.4	UJ	16.2	UJ	20	UJ	10.9	UJ	36	UJ	18.8	UJ
Lead	0.8	UJ	0.87	UJ	0.41	UJ	0.26	U	0.5	UJ	3.2	J
Magnesium	66.2	U	4	U	3.8	U	5.6	U	10	U	12.2	U
Manganese	1.5	U	0.24	U	0.37	U	0.25	U	0.42	U	0.24	U
Mercury	0.03	U	0.05		0.02	U	0.03	U	0.02	U	0.03	J
Nickel	0.48	U	0.5	U	0.51	U	0.49	U	0.99	U	0.5	U
Potassium	17.5	U	18.1	U	11.9	U	11.5	U	11.9	U	11.7	U
Selenium	0.6	J	0.62	J	0.57	U	0.98	J	0.85	J	0.57	U
Silver	0.63	U	0.65	U	0.66	U	1	J	1.3	J	0.65	U
Sodium	33.8	UJ	43.3	UJ	37.8	UJ	31.9	UJ	38	UJ	59	UJ
Thallium	0.99	U	1	U	1	U	1	U	1.4	J	1	U
Vanadium	0.38	J	0.37	U	0.37	U	0.36	U	0.93	J	0.37	U
Zinc	0.4	UJ	0.39	UJ	0.33	UJ	0.52	UJ	0.48	UJ	0.72	UJ
General Chemistry, mg/kg												
TRPH	160		18		10	U	10	U	10	U	38	

Notes for Summary of Analytical Results Tables
Study Area 32

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results

Study Area 37

Naval Training Center, Orlando

Orlando, FL

Identifier	Background Screening [1]		SCG [2] Leaching		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		1 DRUM 37B00101			
Sampling Date									8-Jul-97			
Depth bls (ft)									4.5-5.5			
Semivolatile Organics, ug/kg												
bis(2-Ethylhexyl)phthalate			NA		3,100,000	n	82,000,000	n	86	J		
Pesticides/PCBs, ug/kg												
4,4'-DDD			NA		2,700	c	24,000	c	15	J		
Aldrin			NA		38	c	340	c	9.3			
alpha-Chlordane			NA		490	c	4,400	c	250	D		
gamma-Chlordane			NA		490	c	4,400	c	320	D		
Heptachlor			NA		140	c	1,300	c	32			
Inorganics, mg/kg												
Aluminum	2,119		NA		78,000	n	1,000,000	n	1200			
Barium	3.6		NA		5,500	n	140,000	n	26.9	J		
Calcium	115		NA		1,000,000		1,000,000		393	J		
Chromium	3.7		NA		390	n	10,000	n	2.9			
Copper	ND		NA		3,100	n	82,000	n	1.4	J		
Iron	264		NA		23,000	n	610,000	n	763			
Lead	3.9		NA		400		400		14.2			
Magnesium	32.8		NA		460,468		460,468		20.5	J		
Manganese	2.1		NA		1800	n	47,000	n	2.4	J		
Potassium	185		NA		1,000,000		1,000,000		116	J		
Sodium	ND		NA		1,000,000		1,000,000		53.3	J		
Vanadium	3.4		NA		550	n	14,000	n	0.89	J		
Zinc	5.6		NA		23,000	n	610,000	n	17.3			

Appendix B

Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results

Study Area 37

Naval Training Center, Orlando

Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.

[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). For detected analytes and compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.

[3] RBC = Risk-Based Concentration Table, USEPA Region III, March 1997, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, potassium, sodium, magnesium) screening values were derived based on recommended daily allowances (RDAs).

n = noncarcinogenic pathway

c = carcinogenic pathway

NA = Not applicable (for SCGs) or not analyzed.

ND = Not determined.

mg/kg = milligrams per kilogram.

ug/kg = micrograms per kilogram.

OSWER = Office of Solid Waste and Emergency Response.

USEPA = U.S. Environmental Protection Agency.

J = Reported concentration is an estimated quantity.

All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

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Appendix C
Table C-1. Summary of Soil Analytical Results
Study Area 37

Naval Training Center, Orlando
Orlando, FL

Sample ID	37B00101		37S00101	
Lab ID	C7G100151022		C7G100151021	
Sampling Date	8-Jul-97		8-Jul-97	
Volatile organics, ug/kg				
1,1,1-Trichloroethane	12	U	11	U
1,1,2,2-Tetrachloroethane	12	U	11	U
1,1,2-Trichloroethane	12	U	11	U
1,1-Dichloroethane	12	U	11	U
1,1-Dichloroethene	12	U	11	U
1,2-Dichloroethane	12	U	11	U
1,2-Dichloroethene (total)	12	U	11	U
1,2-Dichloropropane	12	U	11	U
2-Butanone	12	UJ	11	UJ
2-Hexanone	12	UJ	11	UJ
4-Methyl-2-pentanone	12	U	11	U
Acetone	12	UJ	11	UJ
Benzene	12	U	11	U
Bromodichloromethane	12	U	11	U
Bromoform	12	U	11	U
Bromomethane	12	U	11	UJ
Carbon disulfide	12	UJ	11	UJ
Carbon tetrachloride	12	U	11	U
Chlorobenzene	12	U	11	U
Chloroethane	12	U	11	U
Chloroform	12	U	11	U
Chloromethane	12	UJ	11	UJ
cis-1,3-Dichloropropene	12	U	11	U
Dibromochloromethane	12	U	11	U
Ethylbenzene	12	U	11	U
Methylene chloride	12	U	11	U
Styrene	12	U	11	U
Tetrachloroethene	12	U	11	U
Toluene	12	U	11	U
trans-1,3-Dichloropropene	12	U	11	U
Trichloroethene	12	U	11	U
Vinyl chloride	12	U	11	UJ
Xylene (total)	12	U	11	U
Semivolatile organics, ug/kg				
1,2,4-Trichlorobenzene	410	U	370	U
1,2-Dichlorobenzene	410	U	370	U
1,3-Dichlorobenzene	410	U	370	U
1,4-Dichlorobenzene	410	U	370	U
2,2'-oxybis(1-Chloropropane)	410	U	370	U
2,4,5-Trichlorophenol	990	U	910	U
2,4,6-Trichlorophenol	410	U	370	U
2,4-Dichlorophenol	410	U	370	U
2,4-Dimethylphenol	410	U	370	U
2,4-Dinitrophenol	990	U	910	U
2,4-Dinitrotoluene	410	U	370	U
2,6-Dinitrotoluene	410	U	370	U
2-Chloronaphthalene	410	U	370	U
2-Chlorophenol	410	U	370	U
2-Methylnaphthalene	410	U	200	J
2-Methylphenol	410	U	370	U
2-Nitroaniline	990	U	910	U

Appendix C
Table C-1. Summary of Soil Analytical Results
Study Area 37

Naval Training Center, Orlando
Orlando, FL

Sample ID	37B00101		37S00101	
Lab ID	C7G100151022		C7G100151021	
Sampling Date	8-Jul-97		8-Jul-97	
2-Nitrophenol	410	U	370	U
3,3'-Dichlorobenzidine	410	U	370	U
3-Nitroaniline	990	U	910	U
4,6-Dinitro-2-methylphenol	990	U	910	U
4-Bromophenyl-phenylether	410	U	370	U
4-Chloro-3-methylphenol	410	U	370	U
4-Chloroaniline	410	U	370	U
4-Chlorophenyl-phenylether	410	U	370	U
4-Methylphenol	410	U	370	U
4-Nitroaniline	990	U	910	U
4-Nitrophenol	990	U	910	U
Acenaphthene	410	U	370	U
Acenaphthylene	410	U	73	J
Anthracene	410	U	370	U
Benzo(a)anthracene	410	U	79	J
Benzo(a)pyrene	410	U	110	J
Benzo(b)fluoranthene	410	U	160	J
Benzo(g,h,i)perylene	410	U	370	U
Benzo(k)fluoranthene	410	U	130	J
bis(2-Chloroethoxy)methane	410	U	370	U
bis(2-Chloroethyl)ether	410	U	370	U
bis(2-Ethylhexyl)phthalate	86	J	84	J
Butylbenzylphthalate	410	U	370	U
Carbazole	410	U	370	U
Chrysene	410	U	160	J
Di-n-butylphthalate	410	U	370	U
Di-n-octylphthalate	410	U	370	U
Dibenz(a,h)anthracene	410	U	370	U
Dibenzofuran	410	U	56	J
Diethylphthalate	410	U	41	J
Dimethylphthalate	410	U	370	U
Fluoranthene	410	U	160	J
Fluorene	410	U	370	U
Hexachlorobenzene	410	U	370	U
Hexachlorobutadiene	410	U	370	U
Hexachlorocyclopentadiene	410	U	370	U
Hexachloroethane	410	U	370	U
Indeno(1,2,3-cd)pyrene	410	U	370	U
Isophorone	410	U	370	U
N-Nitroso-di-n-propylamine	410	U	370	U
N-Nitrosodiphenylamine (1)	410	U	370	U
Naphthalene	410	U	140	J
Nitrobenzene	410	U	370	U
Pentachlorophenol	990	U	910	U
Phenanthrene	410	U	180	J
Phenol	410	U	370	U
Pyrene	410	U	370	U
Pesticides/PCBs, ug/kg				
4,4'-DDD	15	J	2500	
4,4'-DDE	16	U	1500	U
4,4'-DDT	16	U	1500	U
Aldrin	9.3		1300	

Appendix C
Table C-1. Summary of Soil Analytical Results
Study Area 37

Naval Training Center, Orlando
Orlando, FL

Sample ID	37B00101		37S00101	
Lab ID	C7G100151022		C7G100151021	
Sampling Date	8-Jul-97		8-Jul-97	
alpha-BHC	8.4	UJ	770	UJ
alpha-Chlordane	250	D	38000	D
Aroclor-1016	160	U	15000	U
Aroclor-1221	330	U	30000	U
Aroclor-1232	160	U	15000	U
Aroclor-1242	160	U	15000	U
Aroclor-1248	160	U	15000	U
Aroclor-1254	160	U	15000	U
Aroclor-1260	160	U	15000	U
beta-BHC	8.4	U	770	U
delta-BHC	8.4	UJ	830	J
Dieldrin	16	U	1500	U
Endosulfan I	8.4	U	770	U
Endosulfan II	16	U	1500	U
Endosulfan sulfate	16	U	1500	U
Endrin	16	U	1500	U
Endrin aldehyde	16	U	1500	U
Endrin ketone	16	U	1500	U
gamma-BHC (Lindane)	8.4	U	770	U
gamma-Chlordane	320	D	50000	D
Heptachlor	32		4400	
Heptachlor epoxide	8.4	U	2900	
Methoxychlor	84	U	7700	U
Toxaphene	840	U	77000	U
Inorganics, mg/kg				
Aluminum	1200		1010	
Antimony	3.4	U	3.2	U
Arsenic	0.57	U	3	
Barium	26.9	J	29.4	J
Beryllium	0.07	U	0.07	U
Cadmium	0.63	U	0.9	J
Calcium	393	J	4800	
Chromium	2.9		4.3	
Cobalt	0.77	U	1.7	J
Copper	1.4	J	7.6	
Iron	763		4990	
Lead	14.2		60.6	
Magnesium	20.5	J	180	J
Manganese	2.4	J	32.6	
Mercury	0.12	UJ	0.29	J
Nickel	2.1	U	2.7	J
Potassium	116	J	187	J
Selenium	0.74	U	0.73	J
Silver	0.59	U	0.54	U
Sodium	53.3	J	64.8	J
Thallium	0.67	U	0.61	U
Vanadium	0.89	J	2.8	J
Zinc	17.3		72.5	

Notes for Summary of Analytical Results Tables
Study Area 37

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

1,2-Dichlorobenzene

Appendix B
Table B-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 42

Naval Training Center, Orlando
Orlando, FL

Identifier	Background [1] Screening		SCG [2] Leaching		RBC [3] for Residential Soil		RBC [3] for Industrial Soil		42B00101		42B00201		42B00202		42B00301		42B00401		42B00402	
									1 DRUM		1 DRUM				1 DRUM		1 DRUM			
Sampling Date									9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97	
Depth bls (ft)									5-6		4-5		5-6		3.5-4.5		4-5		5-6	
Semivolatile Organics, ug/kg																				
2,6-Dinitrotoluene			NA		78,000	n	2,000,000	n			230	J								
Inorganics, mg/kg																				
Aluminum	4,870		NA		78,000	n	1,000,000	n	12100		549		245		1330		614		696	
Arsenic	1.9		NA		0.43 / 23	c/n	3.8 / 610	c/n	0.64	J										
Barium	21.6		NA		5,500	n	140,000	n	1.5	J	1.8	J	0.63	J	2.1	J	1.6	J	1.6	J
Calcium	33,568		NA		1,000,000		1,000,000		350	J	358	J			8620					
Chromium	7.7		NA		390	n	10,000	n	10.6		1.2	J	0.62	J	2	J	1.4	J	1.5	J
Copper	2.6		NA		3,100	n	82,000	n	0.6	J	0.44	J			0.41	J	0.36	J		
Iron	843		NA		23,000	n	610,000	n	495		129		43.3		320		196		421	
Lead	21.3		NA		400		400		7.4		2.2		0.75		2.1		1.6		1.8	
Magnesium	381		NA		460,468		460,468								123	J				
Manganese	10.8		NA		1,800	n	47,000	n	0.64	J	0.98	J	0.55	J	1.9	J	0.83	J	0.92	J
Potassium	210		NA		1,000,000		1,000,000		137	J	115	J					87.2	J	104	J
Selenium	1.1		NA		390	n	10,000	n	0.82	J	0.68	J								
Vanadium	4.9		NA		550	n	14,000	n	3.1	J					1.3	J	0.44	J	1.2	J

Notes for Summary of Positive Detections in Subsurface Soil Analytical Results Study Area 42

Naval Training Center, Orlando
Orlando, FL

NOTES:

[1] The background screening value is twice the average of detected concentrations for inorganic analytes.

[2] SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). Arsenic value is as revised in Applicability of Soil Cleanup Goals for Florida (FDEP memorandum, January 19, 1996). Values indicated are from a residential scenario.
Chromium values are for Chromium VI.

[3] RBC = Risk-Based Concentration Table, USEPA Region III, May 1996, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, magnesium, potassium) screening values were derived based on recommended daily allowances (RDAs).
RBC for benzo(g,h,i)perylene and phenanthrene are not available, value is based on pyrene.

n = noncarcinogenic pathway
c = carcinogenic pathway
ND = Not determined.
NA = Not analyzed.
bls = below land surface
OSWER = Office of Solid Waste and Emergency Response.
USEPA = U.S. Environmental Protection Agency.
J = Reported concentration is an estimated quantity.
mg/kg = milligrams per kilogram.
ug/kg = micrograms per kilogram.
All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.
Bold/shaded values indicate exceedance of regulatory guidance and background.
Blank space indicates analyte/compound was not detected at the reporting limit.

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 42

Naval Training Center, Orlando
Orlando, FL

Sample ID	42B00101		42B00201		42B00202		42B00301		42B00401		42B00402	
Lab ID	C7G100151032		C7G100151028		C7G100151029		C7G100151027		C7G100151030		C7G100151031	
Sampling Date	9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97	
Volatile organics, ug/kg												
1,1,1-Trichloroethane	12	U	11	U	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	12	U	11	U	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	12	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethane	12	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	12	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	12	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	12	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	12	U	11	U	11	U	11	U	11	U	11	U
2-Butanone	12	UJ	11	U	11	UJ	11	UJ	11	UJ	11	UJ
2-Hexanone	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
4-Methyl-2-pentanone	12	U	11	U	11	U	11	U	11	U	11	U
Acetone	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Benzene	12	U	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	12	U	11	U	11	U	11	U	11	U	11	U
Bromoform	12	U	11	U	11	U	11	U	11	U	11	U
Bromomethane	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Carbon disulfide	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Carbon tetrachloride	12	U	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	12	U	11	U	11	U	11	U	11	U	11	U
Chloroethane	12	U	11	U	11	U	11	U	11	U	11	U
Chloroform	12	U	11	U	11	U	11	U	11	U	11	U
Chloromethane	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
cis-1,3-Dichloropropene	12	U	11	U	11	U	11	U	11	U	11	U
Dibromochloromethane	12	U	11	U	11	U	11	U	11	U	11	U
Ethylbenzene	12	U	11	U	11	U	11	U	11	U	11	U
Methylene chloride	12	U	11	U	11	U	11	U	11	U	11	U
Styrene	12	U	11	U	11	U	11	U	11	U	11	U
Tetrachloroethene	12	U	11	U	11	U	11	U	11	U	11	U
Toluene	12	U	11	U	11	U	11	U	11	U	11	U
trans-1,3-Dichloropropene	12	U	11	U	11	U	11	U	11	U	11	U
Trichloroethene	12	U	11	U	11	U	11	U	11	U	11	U
Vinyl chloride	12	UJ	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Xylene (total)	12	U	11	U	11	U	11	U	11	U	11	U
Semivolatile organics, ug/kg												
1,2,4-Trichlorobenzene	410	U	350	R	350	U	350	U	350	U	360	U
1,2-Dichlorobenzene	410	U	350	R	350	U	350	U	350	U	360	U
1,3-Dichlorobenzene	410	U	350	R	350	U	350	U	350	U	360	U
1,4-Dichlorobenzene	410	U	350	R	350	U	350	U	350	U	360	U
2,2'-oxybis(1-Chloropropane)	410	U	350	R	350	U	350	U	350	U	360	U
2,4,5-Trichlorophenol	1000	U	840	U	840	U	850	U	850	U	870	U
2,4,6-Trichlorophenol	410	U	350	U	350	U	350	U	350	U	360	U
2,4-Dichlorophenol	410	U	350	U	350	U	350	U	350	U	360	U
2,4-Dimethylphenol	410	U	350	U	350	U	350	U	350	U	360	U
2,4-Dinitrophenol	1000	U	840	U	840	U	850	U	850	U	870	U
2,4-Dinitrotoluene	410	U	350	R	350	U	350	U	350	U	360	U
2,6-Dinitrotoluene	410	U	230	J	350	U	350	U	350	U	360	U
2-Chloronaphthalene	410	U	350	R	350	U	350	U	350	U	360	U
2-Chlorophenol	410	U	350	U	350	U	350	U	350	U	360	U
2-Methylnaphthalene	410	U	350	R	350	U	350	U	350	U	360	U
2-Methylphenol	410	U	350	U	350	U	350	U	350	U	360	U
2-Nitroaniline	1000	U	840	R	840	U	850	U	850	U	870	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 42

Naval Training Center, Orlando
Orlando, FL

Sample ID	42B00101		42B00201		42B00202		42B00301		42B00401		42B00402	
Lab ID	C7G100151032		C7G100151028		C7G100151029		C7G100151027		C7G100151030		C7G100151031	
Sampling Date	9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97	
2-Nitrophenol	410	U	350	U	350	U	350	U	350	U	360	U
3,3'-Dichlorobenzidine	410	U	350	R	350	U	350	U	350	U	360	U
3-Nitroaniline	1000	U	840	R	840	U	850	U	850	U	870	U
4,6-Dinitro-2-methylphenol	1000	U	840	U	840	U	850	U	850	U	870	U
4-Bromophenyl-phenylether	410	U	350	R	350	U	350	U	350	U	360	U
4-Chloro-3-methylphenol	410	U	350	U	350	U	350	U	350	U	360	U
4-Chloroaniline	410	U	350	R	350	U	350	U	350	U	360	U
4-Chlorophenyl-phenylether	410	U	350	R	350	U	350	U	350	U	360	U
4-Methylphenol	410	U	350	U	350	U	350	U	350	U	360	U
4-Nitroaniline	1000	U	840	R	840	U	850	U	850	U	870	U
4-Nitrophenol	1000	U	840	U	840	U	850	U	850	U	870	U
Acenaphthene	410	U	350	R	350	U	350	U	350	U	360	U
Acenaphthylene	410	U	350	R	350	U	350	U	350	U	360	U
Anthracene	410	U	350	R	350	U	350	U	350	U	360	U
Benzo(a)anthracene	410	U	350	R	350	U	350	U	350	U	360	U
Benzo(a)pyrene	410	U	350	R	350	U	350	U	350	U	360	U
Benzo(b)fluoranthene	410	U	350	R	350	U	350	U	350	U	360	U
Benzo(g,h,i)perylene	410	U	350	R	350	U	350	U	350	U	360	U
Benzo(k)fluoranthene	410	U	350	R	350	U	350	U	350	U	360	U
bis(2-Chloroethoxy)methane	410	U	350	R	350	U	350	U	350	U	360	U
bis(2-Chloroethyl)ether	410	U	350	R	350	U	350	U	350	U	360	U
bis(2-Ethylhexyl)phthalate	410	U	350	R	350	U	350	U	350	U	360	U
Butylbenzylphthalate	410	U	350	R	350	U	350	U	350	U	360	U
Carbazole	410	U	350	R	350	U	350	U	350	U	360	U
Chrysene	410	U	350	R	350	U	350	U	350	U	360	U
Di-n-butylphthalate	410	U	350	R	350	U	350	U	350	U	360	U
Di-n-octylphthalate	410	U	350	R	350	U	350	U	350	U	360	U
Dibenz(a,h)anthracene	410	U	350	R	350	U	350	U	350	U	360	U
Dibenzofuran	410	U	350	R	350	U	350	U	350	U	360	U
Diethylphthalate	410	U	350	R	350	U	350	U	350	U	360	U
Dimethylphthalate	410	U	350	R	350	U	350	U	350	U	360	U
Fluoranthene	410	U	350	R	350	U	350	U	350	U	360	U
Fluorene	410	U	350	R	350	U	350	U	350	U	360	U
Hexachlorobenzene	410	U	350	R	350	U	350	U	350	U	360	U
Hexachlorobutadiene	410	U	350	R	350	U	350	U	350	U	360	U
Hexachlorocyclopentadiene	410	U	350	R	350	U	350	U	350	U	360	U
Hexachloroethane	410	U	350	R	350	U	350	U	350	U	360	U
Indeno(1,2,3-cd)pyrene	410	U	350	R	350	U	350	U	350	U	360	U
Isophorone	410	U	350	R	350	U	350	U	350	U	360	U
N-Nitroso-di-n-propylamine	410	U	350	R	350	U	350	U	350	U	360	U
N-Nitrosodiphenylamine	410	U	350	R	350	U	350	U	350	U	360	U
Naphthalene	410	U	350	R	350	U	350	U	350	U	360	U
Nitrobenzene	410	U	350	R	350	U	350	U	350	U	360	U
Pentachlorophenol	1000	U	840	U	840	U	850	U	850	U	870	U
Phenanthrene	410	U	350	R	350	U	350	U	350	U	360	U
Phenol	410	U	350	U	350	U	350	U	350	U	360	U
Pyrene	410	U	350	R	350	U	350	U	350	U	360	U
Pesticides/PCBs, ug/kg												
4,4'-DDD	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
4,4'-DDE	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
4,4'-DDT	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Aldrin	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U

Appendix C
Table C-2. Summary of Subsurface Soil Analytical Results
Study Area 42

Naval Training Center, Orlando
Orlando, FL

Sample ID	42B00101		42B00201		42B00202		42B00301		42B00401		42B00402	
Lab ID	C7G100151032		C7G100151028		C7G100151029		C7G100151027		C7G100151030		C7G100151031	
Sampling Date	9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97		9-Jul-97	
alpha-BHC	2.1	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ
alpha-Chlordane	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Aroclor-1016	41	U	34	U	35	U	35	U	35	U	36	U
Aroclor-1221	84	U	70	U	71	U	71	U	71	U	73	U
Aroclor-1232	41	U	34	U	35	U	35	U	35	U	36	U
Aroclor-1242	41	U	34	U	35	U	35	U	35	U	36	U
Aroclor-1248	41	U	34	U	35	U	35	U	35	U	36	U
Aroclor-1254	41	U	34	U	35	U	35	U	35	U	36	U
Aroclor-1260	41	U	34	U	35	U	35	U	35	U	36	U
beta-BHC	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
delta-BHC	2.1	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ
Dieldrin	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Endosulfan I	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Endosulfan II	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Endosulfan sulfate	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Endrin	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Endrin aldehyde	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
Endrin ketone	4.1	U	3.4	U	3.5	U	3.5	U	3.5	U	3.6	U
gamma-BHC (Lindane)	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
gamma-Chlordane	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Heptachlor	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Heptachlor epoxide	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Methoxychlor	21	U	18	U	18	U	18	U	18	U	18	U
Toxaphene	210	U	180	U	180	U	180	U	180	U	180	U
Inorganics, mg/kg												
Aluminum	12100		549		245		1330		614		696	
Antimony	3.5	U	2.9	U	3	U	3	U	3	U	3.1	U
Arsenic	0.64	J	0.48	U	0.49	U	0.49	U	0.49	U	0.5	U
Barium	1.5	J	1.8	J	0.63	J	2.1	J	1.6	J	1.6	J
Beryllium	0.15	U	0.05	U	0.03	U	0.03	U	0.03	U	0.05	U
Cadmium	0.65	U	0.54	U	0.54	U	0.55	U	0.55	U	0.56	U
Calcium	350	J	358	J	71.1	U	8620		225	U	285	U
Chromium	10.6		1.2	J	0.62	J	2	J	1.4	J	1.5	J
Cobalt	0.78	U	0.65	U	0.66	U	0.66	U	0.66	U	0.68	U
Copper	0.6	J	0.44	J	0.31	U	0.41	J	0.36	J	0.32	U
Iron	495		129		43.3		320		196		421	
Lead	7.4		2.2		0.75		2.1		1.6		1.8	
Magnesium	10.8	U	21.7	U	7.7	U	123	J	18.6	U	20.5	U
Manganese	0.64	J	0.98	J	0.55	J	1.9	J	0.83	J	0.92	J
Mercury	0.13	UJ	0.1	UJ	0.11	UJ	0.11	UJ	0.11	UJ	0.11	UJ
Nickel	2.1	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Potassium	137	J	115	J	68	U	68.4	U	87.2	J	104	J
Selenium	0.82	J	0.68	J	0.63	U	0.63	U	0.63	U	0.65	U
Silver	0.6	U	0.65	U	0.5	U	0.51	U	0.51	U	0.52	U
Sodium	42.6	U	30.1	U	23.9	U	27.1	U	26.8	U	31.7	U
Thallium	0.69	U	0.57	U	0.57	U	0.58	U	0.58	U	0.59	U
Vanadium	3.1	J	0.33	U	0.34	U	1.3	J	0.44	J	1.2	J
Zinc	5.4	U	3	U	2.6	U	2.2	U	3.2	U	3.3	U
General Chemistry, mg/kg												
TRPH	130	U	100	U	110	U	110	U	110	U	110	U

Notes for Summary of Analytical Results Tables
Study Area 42

Naval Training Center, Orlando
Orlando Florida

NA = Identified parameter not analyzed.
Sample ID = Sample Identifier
Lab ID = Laboratory identifier

Units:

mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter

The following standard analytical data qualifiers have the following definitions:

U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
B	Reported concentration is between the instrument detection limit (IDL) and the contract required detection limit (CRDL). The "B" qualifier is typically changed to a "J" (estimated) qualifier following data validation, which is currently pending for groundwater analytical results.